

What is claimed is:

1. A catalyst for purifying exhaust gases, comprising:
a first rhodium-containing catalyst layer deposited on
5 a carrier,
a second zeolite-containing catalyst layer deposited
on the first layer, and
a third palladium-containing catalyst layer deposited
on the second layer.
- 10 2. A catalyst according to claim 1, wherein the carrier
is a monolith carrier or granular carrier.
3. A catalyst according to claim 1, wherein the rhodium
15 is deposited as dispersed in a refractory inorganic powder.
4. A catalyst according to claim 3, wherein the
refractory inorganic substance is at least one member selected
from the group consisting of silicon carbide, alumina, titania,
20 silica and mixtures thereof.
5. A catalyst according to claim 1, wherein the first
catalyst layer further contains an oxide made of one member
selected from the group consisting of rare earth elements,
25 zirconium and barium.
6. A catalyst according to claim 1, wherein the zeolite
is at least one member selected from the group consisting
of ferrierite, MFI zeolite, β -zeolite, Y zeolite, mordenite,
30 and mixtures thereof.

7. A catalyst according to claim 1, wherein the palladium is deposited as dispersed in a refractory inorganic powder.

8. A catalyst according to claim 7, wherein the refractory inorganic substance is at least one member selected from the group consisting of silicon carbide, alumina, titania, silica and mixtures thereof.

9. A catalyst according to claim 1, wherein the third catalyst layer further contains an oxide made of one member selected from the group consisting of rare earth elements, zirconium and barium.

10. A catalyst according to claim 1, wherein the catalyst contains 10-120 g of the first catalyst layer, 60-300 g of the second catalyst layer, and 20-100 g of the third catalyst layer, per 1 liter of the catalyst.

11. A catalyst according to claim 1, wherein the catalyst contains 90-520 g of the 1-3 catalyst layers, per 1 liter of the catalyst.

12. A catalyst according to claim 1 further comprising a fourth catalyst layer containing at least one member selected from the group consisting of platinum, rhodium and mixtures thereof deposited on the third layer.

13. A process for purifying exhaust gases discharged from an internal combustion engine, which comprises:
contacting the gas with a catalyst set forth in claim 1.

14. A catalyst system for purifying exhaust gases comprising:

a catalyst set forth in claim 1, arranged at a down stream side of the gases, and

5 a three-way catalyst arranged at an upper stream side of the gases.